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Interagency Wolf
Working Group
Annual report of
the Montana
Interagency Wolf
Working Group



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Annual report of the Montana Interagency



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EXECUTIVE SUMMARY

1. The Northern Rocky Mountain Wolf Recovery Plan recommended three wolf recovery areas; (1) Northwestern Montana, (2) Central Idaho, and (3) the greater Yellowstone area. Wolves are naturally recolonizing Montana.
2. A Montana Wolf Working Group and Steering Committee, composed of U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Bureau of Land Management, and National Park Service, is coordinating wolf monitoring, control, research, and information programs with other agency cooperators throughout Montana.
3. A three phase wolf monitoring system, (1) detection-public reports, (2) confirmation-agency surveys, (3) and monitoring-radio telemetry is being conducted in northwestern Montana.
4. Wolf observations from 1970 to 1990 are presented with an emphasis on 1990 observations (N=265). A map showing possible, confirmed, and documented (breeding pair) locations indicates an expanding wolf population.
5. In 1988, the Interim Wolf Control Plan was developed and approved by the U.S. Fish and Wildlife Service to control wolves that attack domestic livestock in Montana, Idaho, and Wyoming. In 1990 a wolf near Marion was controlled and other complaints were investigated.
6. Ongoing wolf research on approximately 34 wolves in the North Fork Flathead River drainage is being conducted by the Wolf Ecology Project. Elk, white-tailed deer, and moose research is also being conducted in that area, approximately 90 are radio-collared in cooperation with Montana Department of Fish, Wildlife and Parks, University of Montana and the British Columbia Wildlife Branch.
7. An information and education program distributes factual information about wolves to the public. In 1990, over 73 presentations were given, 100's of news articles written, and thousands of people received information about wolves in various local and national publications. Future I&E projects such as a wolf poster and newsletter are being produced.



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1INTRODUCTION

The 1990 Annual Report was compiled and edited by Joe Fontaine, a wildlife biologist working on wolf recovery with the U.S. Fish and Wildlife Service (Service). Some sections were written by members of the Wolf Working Group (Working Group). The report was prepared to inform interested parties about wolf recovery in Montana during 1990. The status of the four major elements of the ongoing recovery program, wolf monitoring, control of problem wolves, wolf and ungulate research, and information and education activities is presented.

HISTORY OF THE WOLF IN MONTANA

During 1804-1806, Lewis and Clark explored a large region of the Northwestern United States, including Montana, opening up this area for increased fur trapping and trading. Increase of game harvesting and availability of big game carcasses from 1850-1870, particularly the buffalo, led to an ideal situation for an increase in wolf numbers. By 1884 buffalo were virtually exterminated from the plains of Montana, but wolves and other large ungulates were still common. By the 1910's, populations of elk, deer, bighorn sheep and antelope were reduced to very low levels by unregulated market hunting.

Between 1850-1886, cattle numbers increased as the buffalo disappeared and the Native Americans were displaced from their land. As open rangelands began to disappear due to overgrazing and homesteading, and ranches became delineated by fences, stockgrowers became increasingly aware of livestock losses to predators. The first predator bounty was enacted in 1883 at \$1.00 per pelt for wolves, mountain lions, and bears. Between 1883-1918, 80,730 wolves reportedly were killed in Montana for the bounty (it is probable that some of these animals were coyotes). Wolves were virtually eliminated from Montana by 1926.

In the late 1960's the Canadian government allowed wolf populations to increase in the southeastern portion of British Columbia by temporarily reducing wolf hunting and trapping seasons. This allowed for wolf populations to increase and disperse south near Glacier National Park. Since that time there has been an increase in sightings and documentation of wolves in Northwestern Montana.

The wolf was listed as a predator in Montana until 1973. Single, dispersing wolves, possibly from Canada, were killed in Montana in 1964, 1968, 1972, 1974, 1977, and 1979. The State of Montana removed the wolf from the predator list and enacted State law to list the wolf as a State Endangered Species in 1973.

In 1973, the Federal Endangered Species Act (Act) was enacted and the Gray Wolf (Canis lupus) was listed as "Endangered" throughout the lower 48 States. Endangered status, in Montana, of the wolf provides protection until the populations reach recovery levels defined by the Northern Rocky Mountain Wolf Recovery Plan (Plan) and wolves are removed from the list. The latest revision of the Plan, which was approved in 1987, is specific for the Northern Rocky Mountain area and does not recognize any gray wolf subspecies.

In 1986, the first denning of wolves in Montana in over 50 years was documented in Glacier National Park. Since that time wolves have been increasing their numbers and distribution in northwest Montana. In 1990 at least 4 wolf dens were documented in Montana and the population has expanded to an estimated 40-60 individuals in Montana and the immediately adjacent Canada border area.

RECOVERY PLAN

The 1987 Northern Rocky Mountain Gray Wolf Recovery Plan recommended three areas for recovery: (1) Northwestern Montana, (2) Central Idaho, and (3) the greater Yellowstone area. The primary recovery objective is to have 10 breeding pairs of wolves for three successive years in each of the three recovery areas (about 100 wolves in each area). At this level, wolves throughout the Northern Rocky Mountains could be removed from the Endangered Species List. Wolf populations throughout the Northern Rocky Mountains can be eligible for reclassification to threatened status when two recovery areas have 10 breeding pairs for 3 consecutive years. Each wolf population in an individual recovery area may also be delisted when it reaches and maintains 10 breeding pairs for 3 consecutive years, special regulations are established, and a management plan is in place. In accordance with the Act, wolves will be monitored by the Service for at least 5 years after removal from the list to insure that at least 10 breeding pairs are maintained.

WOLF STEERING COMMITTEE AND WORKING GROUP

In 1988, an Interagency Wolf Working Group (Working Group) and Steering Committee was formed to implement and coordinate wolf recovery in Montana. The purpose of the Working Group is to coordinate wolf recovery activities among cooperating agencies in the Northwestern Montana Recovery area. The Working Group has: (1) implemented a wolf monitoring program, (2) coordinated Service and Animal Damage Control (ADC) wolf control efforts, (3) identified, prioritized and initiated wolf research, and (4) developed and implemented an information and education (I&E) program. The Working Group consists of representatives of the U.S. Fish and Wildlife Service, U.S. Forest Service (one Regional Office and five National Forest biologists), Glacier National Park, and U.S. Bureau of Land Management with cooperation from the Confederated Salish and Kootenai Tribes, the Blackfeet Nation, University of Montana, Montana Department of Fish, Wildlife and Parks, Montana Department of State Lands, Animal Plant Health Inspection Service/Animal Damage Control and Montana Department of Livestock. A charter is being developed to formalize the participation of the non-federal organizations in addition to the federal agencies of the Working Group, as interest in wolf recovery increases. Current representatives and their affiliation, address, and phone numbers are listed in the Appendix . At this time, Montana Department of Fish, Wildlife, and Parks is not a formal member of the Working Group or Steering Committee. The Director of the Department of Fish, Wildlife and Parks has identified Mr. Jim Posewitz (Special Assistant to the Director) as the department policy advisor on wolf recovery issues. Mr. Arnold Dood is the MDFWP technical advisor on wolves.

The Steering Committee was established to oversee and provide policy direction to the operations of the Wolf Working Group. The Steering Committee consists of the Field Supervisor, U.S. Fish and Wildlife Service; Director, Northern Region Wildlife and Fisheries, U.S. Forest Service; Forest Supervisors, of the Flathead, Helena, Lewis and Clark, Lolo, and Kootenai National Forests; State Director, Bureau of Land Management; and Superintendent, Glacier National Park. Current representatives and their affiliation are listed in the Appendix.

The goals of the Working Group are: (1) to document establishment of 10 breeding pair of wolves for 3 years, (2) transfer wolf management to the State and Tribes and (3) integrate wolf management into agency decision

making. Everything the Working Group does is designed to allow the population to increase to the biological level needed to delist, assure that delisting can take place, and viable population levels can be maintained after delisting.

In 1989, Dr. Steven Fritts was appointed by the U.S. Fish and Wildlife Service as the Northern Rocky Mountain Wolf Coordinator to oversee and coordinate recovery efforts in all three recovery areas (Northwestern Montana, Central Idaho, and the greater Yellowstone area). He has been involved with wolf research and management for 18 years, including directing the Minnesota control program for 6 years. He holds a Ph. D. in ecology from the University of Minnesota where his dissertation was on the ecology of a rapidly increasing wolf population.

MONITORING

Determining the distribution and number of wolf packs is a critical aspect of Working Group responsibilities. That information defines progress towards recovery and allows agencies to better coordinate their activities with an expanding wolf population. Management of wolves and subsequent delisting is dependent upon knowing the number and distribution of wolves in Montana.

In 1989 an enhanced wolf monitoring system was implemented by the Working Group to determine pack establishment and distribution in Northwestern Montana. The system includes three phases: (1) detection (public reports) - to identify areas where wolves may occur, (2) confirmation (agency surveys) - to confirm wolf pack presence or breeding pair establishment through surveying techniques, and (3) monitoring (radio telemetry) - which is used to systematically document and monitor established packs or breeding pairs (Montana Wolf Recovery, 1st Annual Report).

DETECTION

Wolf observations (1970 to present) have been evaluated and entered into a computerized data base by the Service. A new computer program is being tested to make the system more user-friendly and efficient. The computer program will allow the data to be sorted by geographic distribution, time, number of wolves, or other criteria. Specific

information about individual wolves can also be sorted and compiled. The program contains some minor statistical functions such as mean, standard deviation and summation.

The number of observations reported to the Service has increased dramatically in the past 2 years (Fig. 1). In 1989, there were 162 wolf observation cards sent in. In 1990, there were 265 observation cards received. This increase is believed due to increased interest in the wolf, refinement of the monitoring system, and an actual increase in wolf number (both dispersing from Canada and resident animals). The number of observations for 1970-1988 averaged 59 per year, compared to 212 for 1989 and 1990.

In 1990, a large number of sightings by land status (Fig. 2) came from Glacier National Park (61), Lewis and Clark (49) and Flathead (31) National Forests. In comparison with 1989 land status observations (Fig. 3), there was a 29% increase in Glacier National Park and Flathead National Forest observations, probably due to the close proximity to existing and probable packs. The increase on the Lewis and Clark National Forest (145%) is due to increased PHASE 2 surveys and increasing wolf numbers as well.

The largest number of observations by county in northwest Montana for 1990 (Fig. 4) came from Flathead County (98), Teton County (36) was second and Glacier County (30) was third. In comparison with 1989 observations by county (Fig. 5) there was a 51 % increase for Flathead County and an 87 % increase for Glacier County. The increase in observations was due to increased wolf activity attributed to the proximity of established packs. Teton County observations increased by 800%. The high number of observations is due to an increase in wolf activity along the Rocky Mountain Front and PHASE 2 surveys conducted by the U. S. Forest Service.

The general location of packs (breeding pairs) and areas of possible pack occurrence (Fig. 6) was developed as a result of the wolf observations received from the public. Compared with the 1989 location map (1st Annual Report) there are 5 more locations of reported activity, 2 more confirmed pack locations, and 1 more monitored pack.

FIGURE 1.

WOLF OBSERVATIONS IN MONTANA

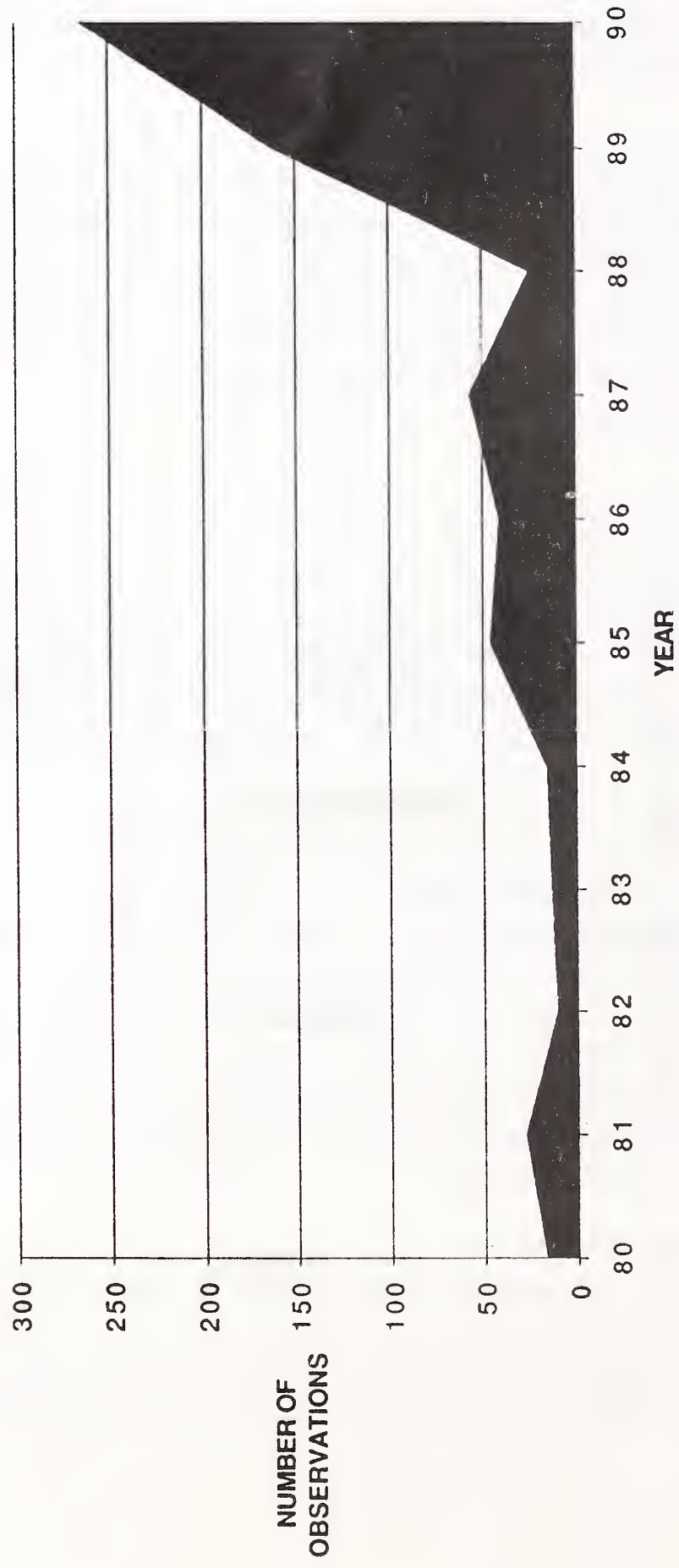
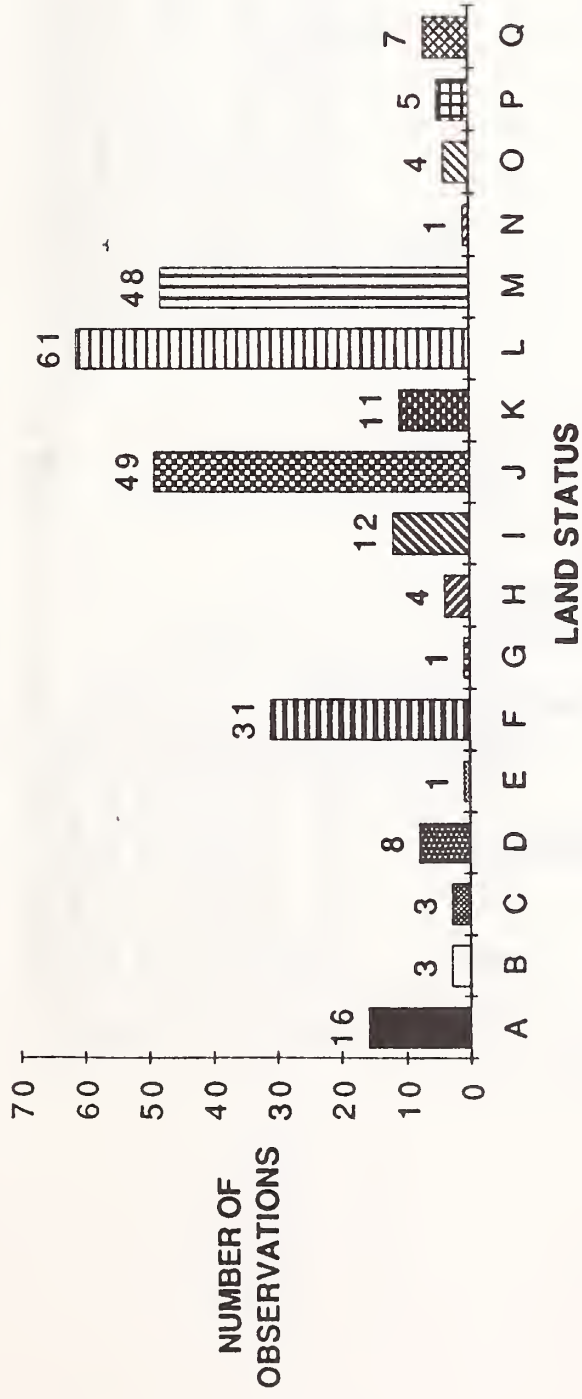


FIGURE 1. Wolf observations in Montana, 1980-1990.

FIGURE 2.

1990 WOLF OBSERVATIONS

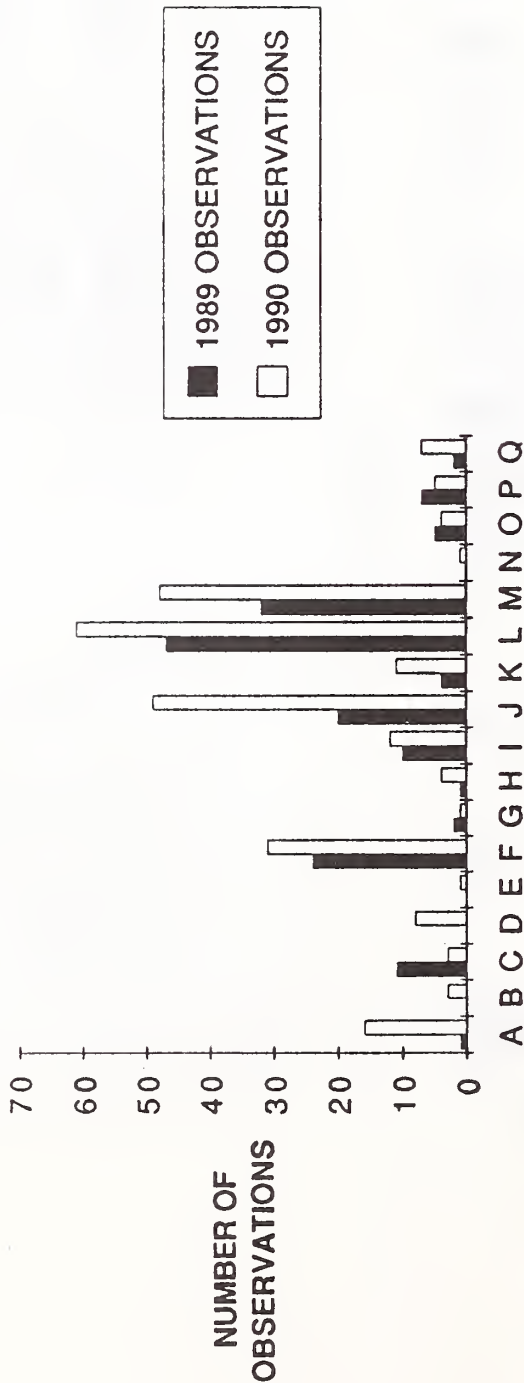


- | | |
|-------------------------|------------------------------|
| A. BIA/BLACKFEET RES. | J. LEWIS AND CLARK NAT. FOR. |
| B. BLM | K. LOLO NAT. FOR. |
| C. BEAVERHEAD NAT. FOR. | L. GLACIER NATIONAL PARK |
| D. BITTERROOT NAT. FOR. | M. PRIVATE |
| E. DEERLODGE NAT. FOR. | N. ANACONDA ALUMINIUM |
| F. FLATHEAD NAT. FOR. | O. PLUM CREEK |
| G. GALLATIN NAT. FOR. | P. CHAMPION INTERNATIONAL |
| H. HELENA NAT. FOR. | Q. STATE OF MONTANA |
| I. KOOTENAI NAT. FOR. | |

Figure 2. Number of wolf observations reported from Montana in 1990, categorized by major land status.

FIGURE 3.

1989 & 1990 WOLF OBSERVATIONS



- A. BIA/BLACKFEET RES.
- B. BLM
- C. BEAVERHEAD NAT. FOR.
- D. BITTERROOT NAT. FOR.
- E. DEERLODGE NAT. FOR.
- F. FLATHEAD NAT. FOR.
- G. GALLATIN NAT. FOR.
- H. HELENA NAT. FOR.
- I. KOOTENAI NAT. FOR.
- J. LEWIS AND CLARK NAT. FOR.
- K. LOLO NAT. FOR.
- L. GLACIER NATIONAL PARK
- M. PRIVATE
- N. ANACONDA ALUMINIUM
- O. PLUM CREEK
- P. CHAMPION INTERNATIONAL
- Q. STATE OF MONTANA

Figure 3. Comparison of the number of wolf observations reported from Montana in 1989 and 1990, categorized by major land status.

FIGURE 4.

1990 WOLF OBSERVATIONS



- | | | |
|----------------|--------------------|-------------|
| A. BEAVER HEAD | I. GRANITE | Q. MINERAL |
| B. CARBON | J. JEFFERSON | R. MISSOULA |
| C. CASCADE | K. JUDITH BASIN | S. PONDERA |
| D. DEERLODGE | L. LAKE | T. POWELL |
| E. FERGUS | M. LEWIS AND CLARK | U. RAVALLI |
| F. FLATHEAD | N. LINCOLN | V. SANDERS |
| G. GALLATIN | O. MADISON | W. TETON |
| H. GLACIER | P. MEAGHER | X. TOOLE |

FIGURE 4. Number of wolf observations reported from Montana in 1990 by county.

FIGURE 5.

1989 & 1990 WOLF OBSERVATIONS

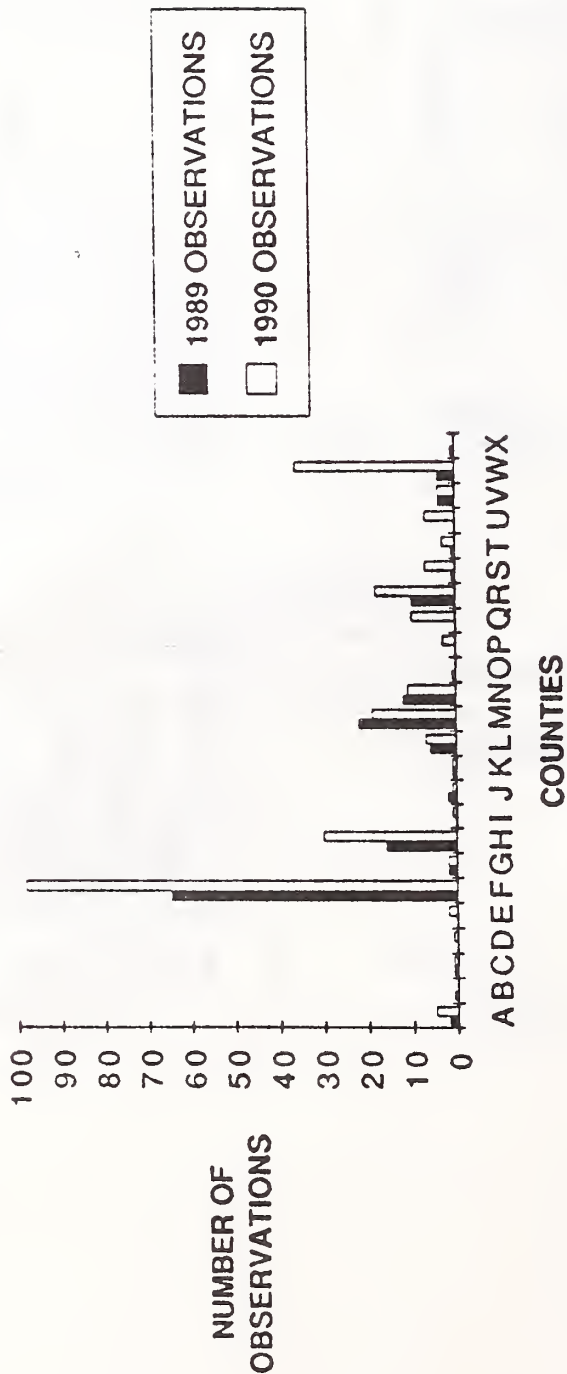


FIGURE 5. Comparison of the number of wolf observations reported from Montana in 1989 and 1990 by county

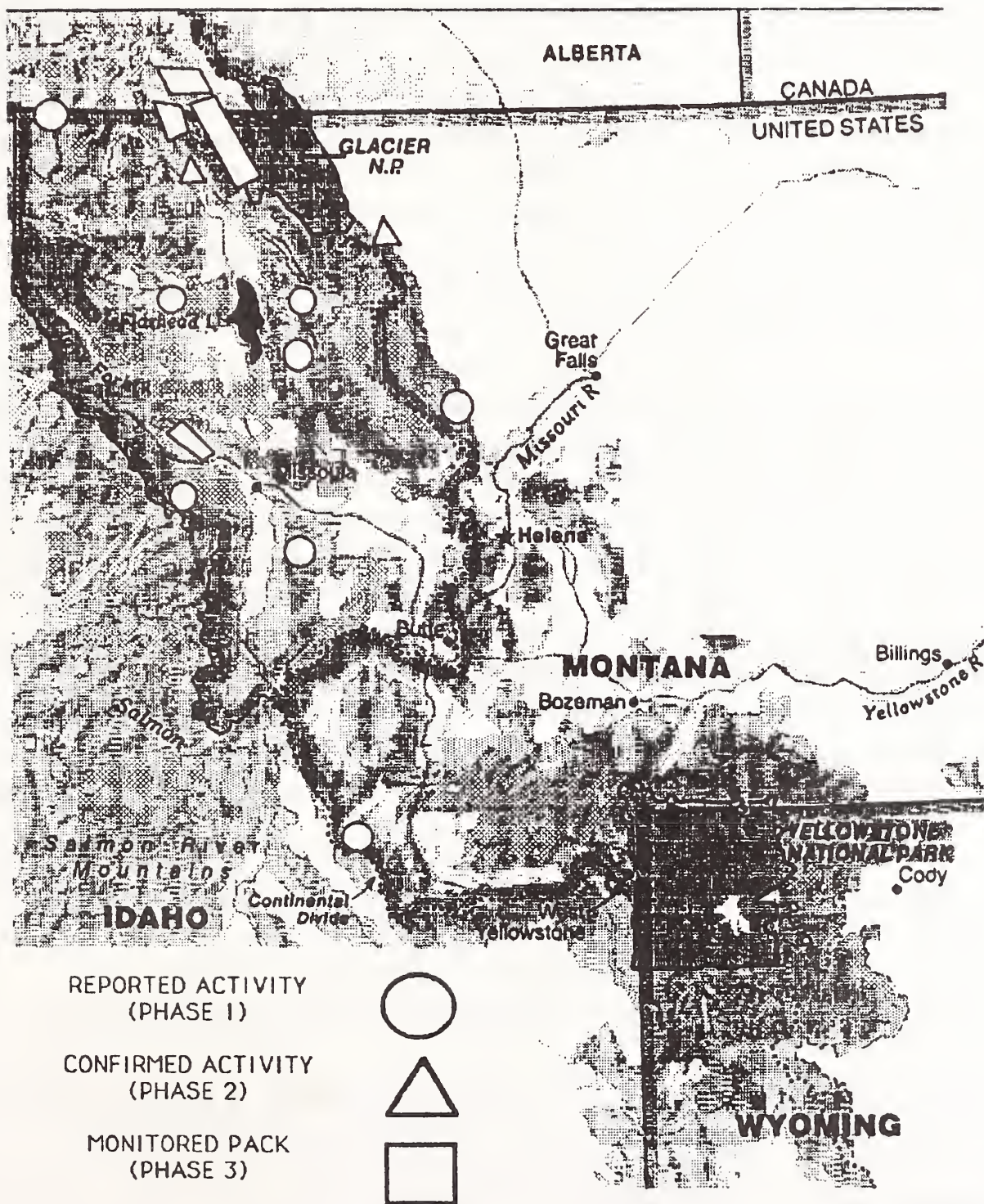


FIGURE 6. Locations of reported and confirmed wolf activity and monitored wolf packs in Montana, 1990.

CONFIRMATION

When a number of public reports (indicating tracks of more than one animal or varying color combinations) are received for one general area, it suggests the presence of a pack or breeding pair. To confirm that a wolf pack or pair exists in that location, PHASE 2 will be conducted by the responsible land management agency or the Service. Confirmed activity means that PHASE 2 surveys have been conducted, and howling, tracks or sightings have documented a wolf pack or breeding pair activity in that area. There are 2 areas of confirmed and 9 areas of possible wolf pack activity. Of the 5 possible wolf pack activity areas identified in 1989, only 2 resulted in confirmed activity.

PHASE 2 surveys were conducted along the Rocky Mountain East Front and in the Fortine area. Surveys along the Front were successful in locating tracks from a small pack. The location of those wolves was not defined to the point where trapping and radio-collaring was possible. In Fortine, surveys located a breeding pair with an estimated 3 pups. A photograph taken with a motion sensing camera confirmed that there were wolves in the area. Efforts initiated in the fall of 1990 to trap and radio-collar members of the pack (PHASE 3) were unsuccessful. The pair apparently moved the pups to another drainage just prior to initiation of trapping. Recent reports suggest that 5 wolves are still in the area.

RADIO-TELEMETRY

The four known wolf packs near Glacier National Park, (Spruce Creek Pair, Headwaters, and Camas North and Camas South), are being studied and monitored by the Wolf Ecology Project as part of the research being funded by the Working Group and University of Montana (see Research).

The black female wolf that was relocated from Marion to Glacier National Park in the fall of 1989 settled into the Ninemile area northwest of Missoula in January of 1990. The female paired with a large gray male in the Ninemile Valley and established a territory. The female gave birth to a litter of 6 pups (3 gray, 3 black) just prior to April 25th. Although the female and her mate established a territory in a heavily populated valley with small livestock operations, neither preyed on livestock. Both the male and female were near livestock on a regular basis without depredation occurring.

The female was illegally killed about the 1st of June. The male assumed sole care of the pups and appeared to do an excellent job. He was apparently killing deer and elk and leading the pups to the kill sites rather than carry the meat to the pups at a rendezvous area. During one of these moves the male encountered and killed a dog near a ranch house. During this period these wolves were monitored by reports received from local residents of wolf tracks, sightings, and howling.

The male was struck and killed by a vehicle on Interstate 90 during Labor Day weekend near the Ninemile Exit. A supplemental feeding program for the orphaned pups was initiated shortly thereafter. Initially, road-killed deer were provided but at the request of Montana Department of Fish, Wildlife and Parks, deer were harvested from an area closed to hunting on Lee Metcalf National Wildlife Refuge and taken to the Ninemile Valley for the pups. Approximately 7 road-killed and 15 harvested deer were provided between September 5 and November 26. Various data and specimens from the harvested deer were used for part of an ongoing research program.

On September 26-28, modified leghold traps were used to trap and radio-collar two of the pups (1 black 4-pound female and 1 gray 56-pound male) in accordance with PHASE 3 of the monitoring system. The pups were closely monitored throughout the general big game hunting season (Oct. 20 to Nov. 25). Hunters were very cooperative and turned in numerous sightings of the wolf pups. Monitoring determined the pups were scavenging on the remains from hunter kills and unretrieved game. At the end of December the pups made their first documented kill, a whitetailed deer fawn.

Shortly before attempting to radio-collar the wolves, it appeared that one of the pups was not with the pack. One black pup had been seen by itself several times and by November did not appear to be with the group which now consisted of four to five wolves. The disappearance of one pup is not surprising as pup mortality can be relatively high during autumn. Mortality can result from diseases, a variety of predators such as adult coyotes, black bear or mountain lions, starvation, or illegal killing by humans. Another possibility is that the abnormal social order within the "pack" may have caused it to separate from the others. To date, we have no knowledge of the status of this animal.

Monitoring of the Ninemile wolves is continuing on a weekly basis but will be reduced in the summer of 1991. While the chances for successful litter production in 1991 from these wolves appears slim, 10-month old wolves have bred in captivity and produced one to two pups. Normally wolves do not breed until 2-3 years old and have an average litter size of 6.

WOLF CONTROL

In August of 1988 an Interim Wolf Control Plan for the Northern Rocky Mountains of Montana and Wyoming (Control Plan) was approved by the Service. The Service's intention is to manage wolves in the northern Rocky Mountains by removing wolves depredating on livestock and allowing non-depredating wolves to be the base population for wolf recovery. Managing wolves under the Control Plan guidelines will enhance the survival of the species by reducing indiscriminate illegal killing of wolves that can result from wolf/livestock conflicts. Wolf management is expected to reduce the frustration of the livestock owners and the antagonism directed toward the general wolf population.

In March 1990 a single wolf control action was conducted by Service and Animal Damage Control personnel near Marion, Montana. A small black yearling female wolf, (presumably the lone surviving pup from the Marion pack which was controlled after livestock depredations in the area in 1989), and a larger gray wolf were observed on several occasions by ranchers and biologists north of Marion. They were near the cattle during the winter of 1989-90 without incident. Then in late March, three newborn calves were confirmed killed by these wolves.

On March 28, ADC personnel set traps to live capture and translocate the offending wolves. Trapping efforts continued through early April, although conditions for trapping were very difficult (mud, snow, freezing and thawing weather). Members of the Wolf Action Group (WAG), a radical environmental organization, were opposed to any wolf control and attempted to hinder trapping operations by walking roads and trails in the control area and chasing the wolves from the area. Efforts to dissuade WAG members from disrupting the live trapping operation were unsuccessful. It was determined that continued trapping efforts would probably be futile in light of the increased human activity.

On April 1, while trapping continued and WAG members were present, a fourth calf was killed. Consultation with the U.S. Fish and Wildlife Service Endangered Species staff resulted in a decision to remove the problem wolves by lethal means if they could not be live-captured. A helicopter was brought in to assist with the operation. Three helicopter flights were conducted from April 4-6. On April 6 a black yearling wolf was observed in the immediate vicinity of the last calf kill site. ADC personnel attempted, with the use of the helicopter, to haze the wolf into open terrain so it could be immobilized with a dart gun. The wolf could not be prevented from going into the heavy timber and was subsequently shot and killed. The control action was immediately discontinued because evidence of the larger wolf had not been seen in the area for several weeks.

Depredations continued with a fifth calf confirmed killed on April 16th. Traps were again set for the remaining wolf but were removed on April 27 when no sign of the wolf could be found. Since that time several sightings have been made of a large gray wolf in the area but no further depredations have been reported.

Compensation payments were provided to the affected rancher by the Defenders of Wildlife in an attempt to alleviate some of the economic loss. Defenders paid the full fall market price for the five calves killed by wolves.

ADC personnel were requested to check at least three other alleged wolf depredations in 1990. The first case was that of a rancher reporting to have witnessed a wolf chasing a calf along the East Front. The calf, ran headlong into a tree and died. There were no marks on the calf and ADC was unable to verify that it was a wolf or a large dog, as there were numerous dogs and tracks in the area. However, Tribal and Forest Service biologists did examine the tracks that appeared to be made by a wolf. They tracked the animal into the mountains where they joined with another large canid. It was assumed that the animal was a wolf. Defenders of Wildlife accepted the rancher's story based upon the evidence and paid him for the loss of his calf.

The second case involved the loss of 4 heifers weighing about 700-800 pounds each. No evidence of wolves or other predators capable of killing these steers could be located in the vicinity of the livestock and there

was no appearance of massive injuries. Evidence indicates that death was not by a predator but actual cause is unknown.

The third complaint received was about a wolf killing sheep in Marion. ADC investigated and determined that the kills were made by a dog. Traps were set in an effort to live-capture the animal. The rancher shot a dog in his sheep pen a few days later and depredations ceased.

Increased awareness of wolves in Montana and availability of compensation payment for livestock killed by wolves will undoubtedly increase the number of complaints of depredations by wolves. In October of 1990, Congress provided additional funding to assist the Service and ADC in resolving complaints of wolf depredations on domestic livestock.

RESEARCH

GRAY WOLF

Several research projects funded by the Wolf Working Group dealing specifically with wolves and their prey are ongoing at this time. Research on wolves is being conducted by the Wolf Ecology Project from the University of Montana with Drs. Robert Ream and Dan Pletscher as principle investigators. The objective of that research is to determine the current status of gray wolves in and near the North Fork Flathead River drainage, on the west side of Glacier National Park. This includes numbers, distribution, natality, mortality, immigration, emigration, food habits, and predation rates. A final report will be completed by September 1992. Additional wolf research in this area will be continued after 1992 if funding priority and other aspects of wolf recovery permit.

In 1990, four packs were monitored (Ream et al,1990). The Camas pack split, (Camas North and Camas South), and produced 2 litters of 6 pups each, one in the northern and one in the southern portion of Glacier National Park. The pack now consists of 19 wolves that are dynamic in their distribution. The Headwaters pack may have had 2 pups survive and now consists of 13 wolves. Another radio-collared pair established a territory along the border near Moose City. The male came from the old

Wigwam territory and the female from the Camas pack. The packs killed more deer in 1990 than in previous years, probably a function of high snow

depths in 1989-90. In December, 1990, the Camas pack killed an adult female cougar.

UNGULATES

Drs. Dan Pletscher and Les Marcum and graduate students from the University of Montana are conducting three 3-year ungulate studies on whitetailed deer (Odocoileus virginianus), elk (Cervus elaphus) and moose (Alces alces) in the North Fork Flathead River drainage. The objectives of these studies are to determine: (1) Seasonal distribution and identification of key seasonal use areas for deer, elk and moose; (2) Age and sex composition of the deer, elk, and moose population in the study area, (3) Age and cause-specific mortality rates for deer, elk, and moose in the study area, and; (4) Establish an index to deer, elk, and moose abundance and distribution that may be used for long term monitoring. The studies are in cooperation and conjunction with grizzly (Ursus arctos horribilis) and black bear (Ursus americanus) research being conducted in the area. Montana Fish, Wildlife and Parks and the British Columbia Wildlife Branch, University of Montana, and the Wolf Working Group are cooperators in the ungulate studies.

The three ungulate studies are producing interesting preliminary data. Approximately 30 animals of each species have been radio-collared for each study. The whitetail deer study will be completed in 1991 and the elk and moose studies will be completed in 1992. Movement data indicates ungulates move freely across the Canada border and are widely dispersed through the Flathead River drainage. So far, five radio-collared elk have died, three have been killed by mountain lions, one by a hunter, and one by wolves. Seven radio-collared whitetailed deer have died; one was accidently killed in a Glacier National Park management action, two were killed by wolves, one by a hunter in British Columbia, one by coyotes, one by a mountain lion and one by a bear. Two radio-collared moose have died, both by grizzly bears. An attempt will be made, if funding is available, to have a Ph.D. candidate continue the monitoring of the ungulates as well as the wolves until 1994-95. The objectives of that study are similar to those of the current projects, plus investigating the landscape ecology between habitat, ungulates and wolves in the North Fork of the Flathead River drainage.

INFORMATION AND EDUCATION

There are many myths, legends and misconceptions about the wolf. Providing accurate information about wolves is the Working Group's most important task. An information and education program was initiated to provide factual information about wolves and wolf recovery in Montana. Following are some of the activities and products produced through the program.

A "Fact Sheet" was written to provide accurate information about the wolf. It was sent to the Service's Regional Office in Denver for review and submission to the Washington Office for review. It should be available for publication in 1991 and continued on a regular basis. It will be distributed to people that have submitted a wolf observation card, or are interested in the Montana Wolf Recovery Program. The Montana Wolf mailing list is comprised of approximately 1,000 people interested in wolf recovery.

The National Wildlife Federation Missoula, Montana office, with support from the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Central Idaho Wolf Committee, have assembled a traveling trunk for use by teachers. Contents of the traveling trunks include coyote and wolf pelts, skulls, plaster casts of wolf, mountain lion, elk and coyote tracks, an elk skull, photographs, videos, a poster, books, scat samples, a felt story board, and many other items. Also included is a manual with background material on a variety of subjects related to wolves as well as suggested activities, games and student lesson plans. The trunks are appropriate for pre-schoolers through adult, though the majority of activities focus on first through seventh grade.

The trunks may be checked out to a classroom for one week at a time, allowing students time to thoroughly examine the contents. Trunks can be shipped or picked up at sponsoring offices. Eventually 25 boxes will be available, distributed throughout Montana, Idaho, and Wyoming. There are five trunks ready for use at the locations indicated in the Appendix.

A key part of the I&E program is to interact with local people concerned about wolf recovery, present factual information, and listen to their concerns. This can be accomplished by presenting wolf natural history and recovery information in Montana to local clubs, organizations and to

agencies throughout western Montana. In 1990, 73 presentations were made by Service personnel to approximately 3,100 people in Montana. This does not include numerous other meetings with the Wolf Working Group, other agencies, researchers, conservation organizations, reporters, journalists, T.V. and radio interviews and talk shows, nor does it include activities by wolf recovery coordinator, Dr. Fritts. In 1990, over 100 newspaper and magazine articles were published on wolves and wolf recovery in Montana. Anyone interested in arranging for a presentation can contact the U.S. Fish and Wildlife Service in Helena at 449-5225.

Glacier National Park produced a pamphlet for 1990 park visitors (2 million annually). The pamphlet introduced visitors to wolves by showing how the animal fits into the ecological niche and the food chain. The pamphlet also discussed wolf recovery in the Northern Rocky Mountains.

In 1991, an Information and Education Sub-committee will be developed within the Working Group. The committee will develop I & E projects about the wolf and wolf prey. Some of the projects that will be finalized are a poster requesting wolf observations, a pamphlet on wolf/livestock/ungulate interactions, and pamphlets and posters for school children. Other projects will be considered and completed as time and funding allow.

SUMMARY

The wolf, eliminated from Montana around the 1920's, is returning to the northwestern part of Montana on its own. The comeback is due to the effort by the Canadian government to manage wolves in the lower part of the Provinces, the desire by the people of Montana and the country as a whole, to have the wolf as a part of the ecosystem, and the increase in ungulate numbers brought about by the State's ungulate management practices. There have been a few recent setbacks along the way such as the Browning and Marion control action, the illegal killing of the translocated female and the death of her mate on Interstate 90 by a vehicle. However, there is a "silver lining" to all of the losses. The establishment of the Ninemile pack northwest of Missoula, the southern most documented pack in Montana, is a direct result of the female being translocated. The possibility exists that the new pack may produce young, some of which could disperse to Idaho.

Despite some losses, wolf numbers in and adjacent to the U.S./Canada border are increasing from the original Magic pack discovered by Dr. Ream in 1986 to 4 monitored, 2 confirmed and a possible 9 breeding pairs or packs as indicated by the observations and activities of 1990 (Fig. 6). The increased number of sightings in Montana from 10 in 1970 to 265 in 1990 also documents this success. Some of the increase in sightings is due to the development and refinement of a monitoring system to document pack activity, the refined reporting system, and the heightened awareness of agency personnel and the public. The monitoring system is important in providing the knowledge about wolf numbers and distribution that are needed for sound wolf management, to document wolf abundance as it progresses toward recovery and the delisting and transition to management by state and tribal governments.

We expect wolf observations will increase even more in the future as public awareness of wolf recovery and the number of packs increase. The future of wolf recovery in Montana looks very promising. As more people become aware that many of the fears about wolf recovery are unfounded, (i.e. wolves are not a threat to human safety, do not usually attack livestock, rarely contribute to declines in ungulate populations, and do not require extensive changes in current land uses), people will welcome the return of wolves as part of Montana's wildlife heritage.

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APPENDIX

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PROTECTED-GRAY WOLF

Gray wolves are present in Montana and are protected by State, Federal, and Tribal laws. To assist in wolf management, please report any wolf sightings to the nearest Montana Department of Fish, Wildlife, and Parks, U.S. Fish and Wildlife Service, U.S. Forest Service, Animal Damage Control, Bureau of Land Management, Department of State Lands Office, and Tribal Game Officer or biologist.

• 2.5 FEET TALL

• 5 - 6 FEET LONG

• 80 - 100 POUNDS

• BROAD SNOUT, ROUND EARS

• COLOR VARIES FROM BLACK TO WHITE

• LONG LOW MOAN



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